INDUSTRIAL SERIES
Non Isolated DC–DC Converters

ICT Industrial Power Series converters are non–isolated DC to DC converters designed for use on negative ground systems. Each converter is designed for high efficiency and long service life. The rugged case and modular design have proven durable in harsh environments. ICT offers an un–matched selection of voltages and currents to meet your requirements. Standard features on all models include fuse protection, high surge capacity, easy access mounting holes, and a terminal strip connector.



Performance and Flexibility

Models are available in step up and step down models from 2.5 amps to 40 amps to match your needs, including voltage ranges for those hard to find applications. All ICT converters are field proven to work under all types of conditions, and many models are CSA approved.

Reliability

Reliability is achieved through careful design that virtually eliminates internal wiring and connections that can fail. ICT Industrial Series converters have proven tough over years of service. ICT converters are especially adept at handling adverse vibration and moisture prone environments. All models are designed to operate from –46 degrees C to plus 40 degrees C. Convection cooling means there are no moving parts to fail. Extra silicone is used for vibration and moisture resistance.

Built In Protection

All models feature built in protection features, including current limiting, high surge capacity, and internal fuses to protect against polarity reversal. ICT Industrial Series converters come with all the protection you need.

TECH NOTE

Up/Down converters are used in applications where the input (source) voltage may vary, but the load is sensitive and requires a stable 13.8VDC or 27.6 VDC output.

MODEL SELECTOR GUIDE

Type	Input Voltage	Output Voltage	Output Current	Model Number
STEP UP	6V	12V	15A	ICT612–15A
	12V	24V	15A	ICT1224–15A
STEP DOWN	24V	12V	2.5A	ICT2412–2.5A *
	24V	12V	5A	ICT2412–5A *
	24V	12V	10A	ICT2412–10A *
	24V	12V	15A	ICT2412–15A *
	24V	12V	20A	ICT2412–20A *
	24V	12V	30A	ICT2412–30A *
	24V	12V	40A	ICT2412–40A *
	24V	5V	5A	ICT245–5A
	24V	5V	10A	ICT245–10A
	12V	5V	10A	ICT125–10A
	12V	8V	5A	ICT128–5A
	20–65V	12V	10A	ICT4812–10A
	20–65V	12V	20A	ICT4812–20A *
	36–60V	24V	10A	ICT4824–10A *
UP/DOWN	10–30V	24V	5A	ICT2024–5A
	10–30V	12V	10A	ICT2012–10A

* Indicates model is CSA approved

ICT also makes converters for fully isolated and Class 1 Div 2 Hazardous Location applications. Find out more at www.ict–power.com. Call ICT for custom models and modifications.

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Specifications

STEP UP

Model Number	Input Voltage Range	Output Voltage	Output Current (Cont.)	Output Current (Peak)	Current Limiting	Line Regulation	Load Regulation	Output Ripple (Max)	Efficiency (Typical)	Input Fuse	Over Voltage Protection	Dimensions (refer to drawing)
ICT612-15A	6–10 VDC	13.8 VDC +/– 150 mV	12.0 Amps	15.0 Amps	15.5 Amps	0.7%	0.3%	40mV RMS	88%	50 Amp	––	B
ICT1224-15A	10.5–18.0VDC	27.6 VDC +/– 150 mV	12.0 Amps	15.0 Amps	15.5 Amps	0.45%	0.3%	40mV RMS	92%	50 Amp	––	B

STEP DOWN

Model Number	Input Voltage Range	Output Voltage	Output Current (Cont.)	Output Current (Peak)	Current Limiting	Line Regulation	Load Regulation	Output Ripple (Max)	Efficiency (Typical)	Input Fuse	Over Voltage Protection	Dimensions (refer to drawing)
ICT2412-2.5A	20–30 VDC	13.8 VDC +/– 300 mV	2.25 Amps	2.5 Amps	2.6 Amps +/– 5%	0.6%	0.15%	20mV RMS	88%	3 Amp	16.0V	A
ICT2412-5A	20–30 VDC	13.8 VDC +/– 300 mV	4.5 Amps	5.0 Amps	5.25 Amps +/– 5%	0.2%	0.85%	20mV RMS	88%	5 Amp	16.0V	A
ICT2412-10A	20–30 VDC	13.8 VDC +/– 150 mV	9.0 Amps	10.0 Amps	10.5 Amps +/– 5%	0.5%	0.4%	40mV RMS	80%	10 Amp	16.0V	B
ICT2412-15A	20–30 VDC	13.8 VDC +/– 300 mV	13.5 Amps	15.0 Amps	16.0 Amps +/– 5%	0.45%	0.3%	40mV RMS	88%	15 Amp	16.0V	B
ICT2412-20A	20–30 VDC	13.8 VDC +/– 300 mV	18.0 Amps	20.0 Amps	21.0 Amps +/– 5%	0.45%	0.3%	40mV RMS	88%	20 Amp	16.0V	B
ICT2412-30A	20–30 VDC	13.8 VDC +/– 300 mV	25.0 Amps	30.0 Amps	31.0 Amps +/– 5%	0.45%	0.3%	40mV RMS	95%	30 Amp	16.0V	B
ICT2412-40A	20–30 VDC	13.8 VDC +/– 300 mV	36.0 Amps	40.0 Amps	42.0 Amps +/– 5%	0.45%	0.3%	40mV RMS	95%	50 Amp	16.0V	B
ICT245-5A	20–30 VDC	5.0 VDC +/– 50 mV	5.0 Amps	5.0 Amps	5.3 Amps +/– 5%	1.0%	1.0%	35mV RMS	80%	5 Amp	6.0V	A
ICT245-10A	20–30 VDC	5.0 VDC +/– 50 mV	10.0 Amps	10.0 Amps	10.5 Amps +/– 5%	1.0%	1.0%	30mV RMS	80%	10 Amp	6.0V	B
ICT125-10A	10–15 VDC	5.0 VDC +/– 50 mV	10.0 Amps	10.0 Amps	10.5 Amps +/– 5%	1.0%	1.0%	30mV RMS	80%	10 Amp	6.0V	B
ICT128-5A	11–16 VDC	8.0 VDC +/– 100 mV	4.5 Amps	5.0 Amps	5.5 Amps +/– 5%	1.0%	1.0%	20mV RMS	87%	5 Amp	10.0V	A
ICT4812-10A	20–55 VDC	13.8 VDC +/– 200 mV	9.0 Amps	10.0 Amps	10.5 Amps +/– 5%	0.7%	0.6%	20mV RMS	85%	10 Amp	16.0V	B
ICT4812-20A	20–65 VDC	13.8 VDC +/– 200 mV	17.0 Amps	20.0 Amps	20.5 Amps +/– 5%	0.7%	0.7%	25mV RMS	85%	20 Amp	16.0V	B
ICT4824-10A	36–60 VDC	27.6VDC +/– 200 mV	8.0 Amps	10.0 Amps	11.0 Amps +/– 5%	1.0%	1.0%	00mV RMS	88%	20 Amp	30.0V	B

UP/DOWN

Model Number	Input Voltage Range	Output Voltage	Output Current (Cont.)	Output Current (Peak)	Current Limiting	Line Regulation	Load Regulation	Output Ripple (Max)	Efficiency (Typical)	Input Fuse	Over Voltage Protection	Dimensions (refer to drawing)
ICT2024-5A	10–30 VDC	27.6 VDC +/– 300 mV	4.0 Amps	5.0 Amps	.5.5 Amps +/– 5%	0.5%	0.8%	40mV RMS	85%	35 Amp	––	B
ICT2012-10A	10–30 VDC	13.8 VDC +/– 300 mV	7.0 Amps	10.0 Amps	10.5 Amps +/– 5%	1.8%	0.8%	20mV RMS	85%	35 Amp	––	B

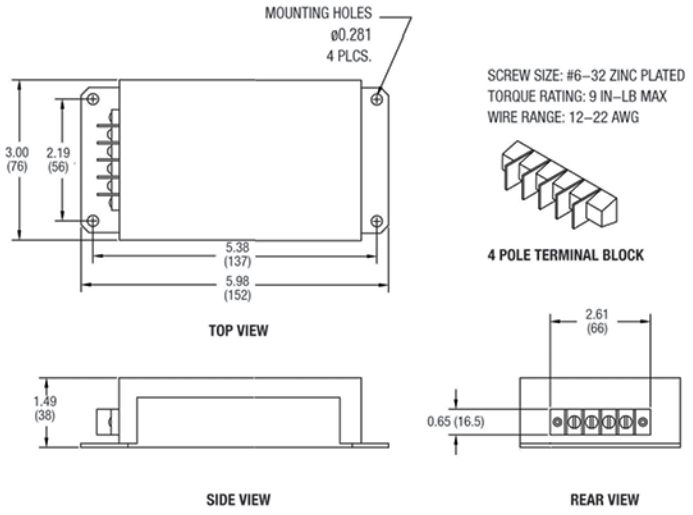
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Dimensions

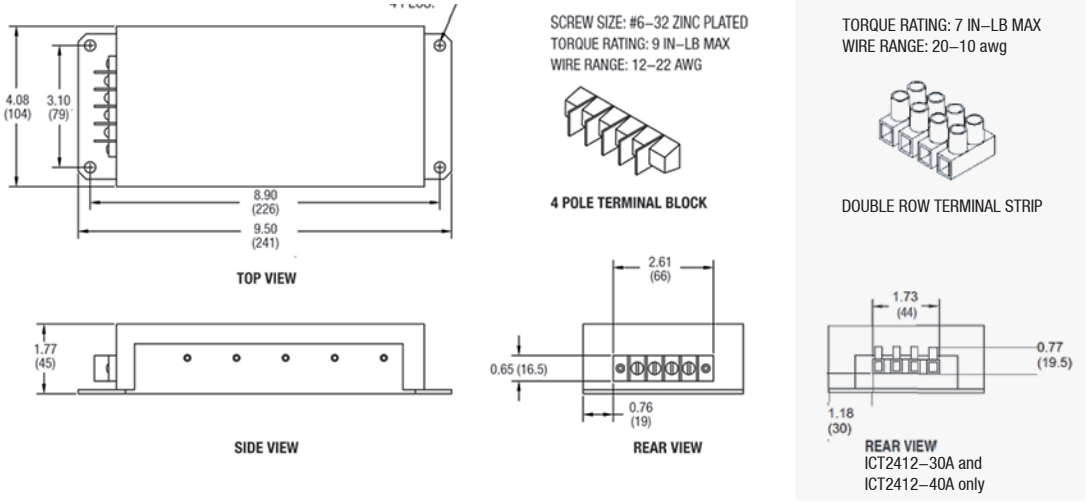
All measurements provided in inches and (millimeters).

Drawing A



Model Numbers
ICT2412–2.5A
ICT2412–5A
ICT128–5A
ICT245–5A

Drawing B



Model Numbers
ICT2412–10A
ICT2412–15A
ICT2412–20A
ICT2412–30A
ICT2412–40A
ICT612–15A
ICT1224–15A
ICT2012–10A
ICT2024–5A
ICT4812–10A
ICT4812–20A
ICT4824–10A
ICT245–10A
ICT125–10A

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